**8.6 Solving Rational Equations**.  
Objective: To solve rational equations.  
To use rational equations to solve problems.

**Rational Equation: an equation that contains at least one rational expression**

**Extraneous Solution: a solution of the derived equation, but not a solution of the original solution.   
*\*Any time you multiply each side of an equation by an algebraic expression it is possible.***

**Steps to Solving Rational Equations** **using LCD: (**eliminates denominator**)**

1. Multiply each term on both sides of the equation by the LCD
2. Simplify
3. Solve resulting polynomial equation
4. Check Solutions

*The LCD: 2x*

*The LCD: (x+5)(x-5)*

***Note****: You can also use a graphing calculator to solve by graphing both sides of the equation and seeing where they cross.*

***Homework: page 545 #1-5, 9-19 (odd), 31-35 (odd)***